

Gap Pad® I500S30

Highly Conformable, Thermally Conductive, Reinforced "S-Class" Gap Filling Material

Features and Benefits

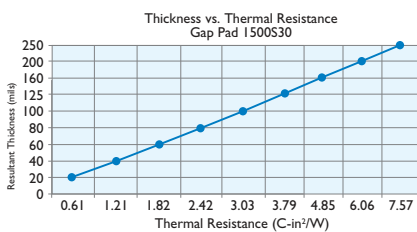
- Thermal conductivity: 1.3 W/m-K
- Highly conformable / low hardness
- Decreased strain on fragile components
- Fiberglass reinforced for puncture, shear and tear resistance
- Quick rebound to original shape



Gap Pad I500S30 is a highly compliant Gap Pad material that is ideal for fragile component leads. The material is fiberglass reinforced for improved puncture resistance and handling characteristics. Gap Pad I500S30 maintains a conformable, yet elastic nature that provides excellent interfacing and wet-out characteristics, even to surfaces with high roughness or uneven topography.

Gap Pad I500S30 features an inherent tack on both sides of the material, eliminating the need for thermally impeding adhesive layers.

Note: Resultant thickness is defined as the final gap thickness of the application.



TYPICAL PROPERTIES OF GAP PAD I500S30			
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Light Pink	Light Pink	Visual
Reinforcement Carrier	Fiberglass	Fiberglass	ASTM D374
Thickness (inch) / (mm)	0.020 to 0.250	0.508 to 6.350	ASTM D374
Inherent Surface Tack (1 side)	2	2	—
Density (Bulk Rubber) (g/cc)	1.8	1.8	ASTM D792
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269
Hardness (Bulk Rubber) (Shore 00) (1)	30	30	ASTM D2240
Young's Modulus (psi) / (kPa) (2)	16	110	ASTM D575
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—
ELECTRICAL			
Dielectric Breakdown Voltage (Vac)	>6000	>6000	ASTM D149
Dielectric Constant (1000 Hz)	5.0	5.0	ASTM D150
Volume Resistivity (Ohm-meter)	10 ¹¹	10 ¹¹	ASTM D257
Flame Rating	V-O	V-O	UL 94
THERMAL			
Thermal Conductivity (W/m-K)	1.3	1.3	ASTM D5470
THERMAL PERFORMANCE vs. STRAIN			
	Deflection (% strain)		
	10	20	30
Thermal Impedance (°C-in ² /W) 0.040" (3)	1.69	1.41	1.26

1) Thirty second delay value Shore 00 hardness scale. 2) Young's Modulus, calculated using 0.01 in/min. step rate of strain with a sample size of 0.79 inch³. 3) The ASTM D5470 test fixture was used. The recorded value includes interfacial thermal resistance. These values are provided for reference only. Actual application performance is directly related to the surface roughness, flatness and pressure applied.

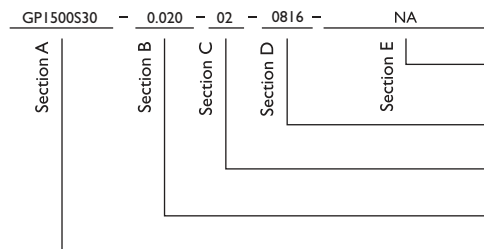
Typical Applications:

- Any heat-generating component and a heat sink
- Computers and peripherals
- Telecommunications
- Between any heat-generating semiconductor and a heat sink
- Shielding devices

Configurations Available:

- Sheet form and die-cut parts

Building a Part Number



Standard Options

◀ example

NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and revision level.

0816 = Standard sheet size 8" x 16", or 00 = custom configuration

02 = Natural tack, both sides

Standard thickness available: 0.020", 0.040", 0.060", 0.080", 0.100", 0.125", 0.160", 0.200", 0.250"

GPI500S30 = Gap Pad I500S30 Material

Note: To build a part number, visit our website at www.bergquistcompany.com.



www.bergquistcompany.com

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